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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,719	08/27/2003	Kazunari Hamasaki	32739M086	3866

441 7590 03/11/2005

SMITH, GAMBRELL & RUSSELL, LLP  
1850 M STREET, N.W., SUITE 800  
WASHINGTON, DC 20036

EXAMINER
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FEDOWITZ, MATTHEW L

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/648,719

Applicant(s)

HAMASAKI ET AL.

Examiner

Matthew L. Fedowitz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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### DETAILED ACTION

Claims 1-12 are pending in this action.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

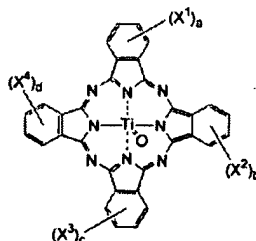
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamasaki *et al.* (US 6,528,645 B1).

Claims 1-7 are directed to a titanyl phthalocyanine crystal that has a maximum peak at 27.2° and no peak at 7.4°; where there is no peak with a change in temperature from 50 to 400°; where there is no peak at 26.2° and a structure as depicted below:



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Where  $X^{1-4}$  are the same or different and a-d represent an integer of 0 to 4. Further, the titanyl phthalocyanine crystal has a maximum peak at  $27.2^\circ$  and no peak at  $7.4^\circ$  after dipping in an organic solvent where there is no peak with a change in temperature from 50 to  $400^\circ$ ; where the organic solvent organic solvent consists of tetrahydrofuran, dichloromethane, toluene and 1, 4-dioxane.

Claims 8 and 9 are drawn to a method of producing a titanyl phthalocyanine crystal that includes a pigment pretreatment step, a recrystallization step and a dispersing pigmentation step.

Claims 10-12 are drawn to an electrophotosensitive material that comprises a conductive substrate and a photosensitive layer that can be of the single or multilayer type and contains the titanyl phthalocyanine crystal as an electric charge generating material.

As relating to claims 1-12, Hamasaki *et al.* in US 6,528,645 B1 teach compounds compositions and methods that are of the same nature as titanyl phthalocyanine crystals and the production methods thereof as claimed by applicant. Though the teachings of Hamasaki *et al.* in US 6,528,645 B1 are similar, they are not in the same format as the current application. The differences in format, however, are insignificant and inherently similar to the current application.

As relating to applicant's claims 1-7, these claim are a combination of US 6,528,645 B1 claims 1-10. The art reference Claims 1, 2, 4, 5, 9 and 10 are not directed to the lack of a peak at  $7.4^\circ$  in a  $\text{CuK}\alpha$  characteristic x-ray diffraction; however, Hamasaki *et al.* describe the peaks found immediately after preparation and after dipping where peaks appear at  $24.1^\circ$ ,  $27.2^\circ$  and  $26.2^\circ$  (disappearing at  $26.2^\circ$  after dipping) (see column 23 lines 33-55). The fact that Hamasaki *et al.* describe where the peaks can be found inherently teaches that no peak existed at  $7.4^\circ$ . Therefore, if there had been a peak at  $7.4^\circ$ , Hamasaki *et al.* would have described it. Further,

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applicant has apparently rearranged the claims from US 6,528,645 B1 in order to claim subject matter that was inherent to the reference.

As relating to claims 8 and 9, these claims are a combination of US 6,528,645 B1 claims 8-14. Claims 8 and 9 recite the same steps found US 6,528,645 B1 claims 8-14 with insignificant differences. The differences found in claims 8 and 9 are within the pigmentation step where the solution is stirred at 30 to 100°C for 5 to 60 hours. These limitations are inherent in US 6,528,645 B1 because, though the temperature is not mentioned in the patent pigmentation step, the temperature is presumed to be within a range of room temperatures. The range of 30 to 100°C overlaps this range of room temperatures and as a result anticipates the applicant's claim. In addition, the applicant states that the solution should be stirred for 5 to 60 hours; however, this portion of the claim is anticipated too. US 6,528,645 B1 states in claims 7, 8, 11, 12, 13 and 14 that during the pigmentation step the solution should be stirred under heating for a fixed time. The time period of 5 to 60 hours is a fixed time and is therefore anticipated.

As relating to claim 10-12, US 6,528,645 B1 teaches all the limitations found within the claims. The applicant's electrophotosensitive material in a single or multilayer form is disclosed in the references with insignificant differences from the applicant's claims (column 10 lines 3-41 and column 11 lines 1-52).

The motivation for the applicant's claims are found in US 6,528,645 B1 column 23 lines 33-55 where the patent does not mention a peak at 7.4° in describing the x-ray diffraction. By observing that a peak was not described, the applicant is now attempting to seize on an obvious inherency from the issued patent and claim such matter in the current application by rearranging the claims of US 6,528,645 B1 to distinguish them from the cited patent.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to see the omissions of the teachings above in order to obtain the compounds and methods as claimed in the instant application. All of the moieties, which are substituted in the instant application, are taught in the art, and the locations of substitution are correlative with the locations of substitution in the art. Obviousness based on similarity of structure, functions and methods of production entail motivation to claim the inherent properties of the patented art; therefore, one of ordinary skill in the art would be motivated to make the claimed compounds using the claimed methods in searching for new and optimized titanyl phthalocyanine crystals.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew L. Fedowitz whose telephone number is (571) 272-3105.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

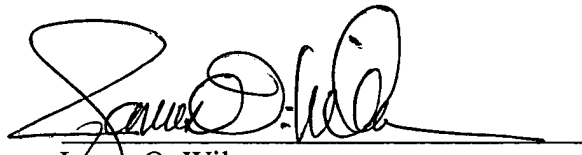
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Matthew L. Fedowitz, Pharm.D., J.D.  
November 9, 2004



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James O. Wilson  
Supervisory Patent Examiner  
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